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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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Commissioner of Patents and Trademarks

Attest



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United States Patent [19]
Leyden et al.

[11] **Patent Number:** **5,552,771**
[45] **Date of Patent:** **Sep. 3, 1996**

[54] **RETRACTABLE SENSOR FOR AN ALARM SYSTEM**

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5,341,124 8/1994 Leyden 340/568

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[51] **Int. Cl.:** **G08B 13/14**

[52] **U.S. Cl.:** **340/568; 340/665; 340/548; 340/571**

[58] **Field of Search** 340/568, 691, 340/651, 652, 665, 548, 571; 200/61.13, 61.93

[56] **References Cited**

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[57] **ABSTRACT**

A retractable sensor assembly for use with an alarm system to prevent theft of valuable products while eliminating the problem of entangled and unsightly sensor cords is disclosed. The retractable sensor allows the user to grasp the product and pull it to a comfortable position. The invention consists of a housing, a retraction means contained in the housing, a sensor having two states, 1) secured when attached to the product and 2) unsecured when detached from the product, a multiconductor cable having a first end connected to the sensor, cooperating with the retraction means and a second end extending out of the housing, where the retraction means urges the sensor to the housing, yet allows the sensor to be pulled from the housing when an external force is exerted on the sensor, while maintaining a continuous electrical path from the first, sensor end of the cable to the second end of the cable.

11 Claims, 3 Drawing Sheets

